number of pulsations, making them about the same as I did. I recommended the removal of the patient to the Royal Infirmary, where she was taken two days later, and was dismissed convalescent in a fortnight. She was delivered of a very large and healthy child on the night of 8th March, 1875—that is to say—six calendar months and two days, or 183 days, after I heard the fœtal heart, which was, taking 278 days as the average duration of pregnancy, only 96 days (13 weeks and 5 days) after the supposed successful coitus. It is right to add that the woman expected to be confined some time before the labour came off, and the very large size of the child makes it possible that pregnancy was protracted somewhat longer than usual, and that consequently an earlier date should be fixed for its commencement. But still the fact remains that the fœtal heart was heard in this case six calendar months before parturition, that is, about the beginning of the fourth calendar month of pregnancy.

"I have thought this case worthy of a short note, as being one of the earliest dates on record of hearing the fœtal heart, and because it shows that in a favourable case the diagnosis of pregnancy may be made certain in this way much earlier than is usually supposed. We were fortunate in this case in hitting upon the spot where the heart was nearest the surface at once, but in other cases in which I have examined for it in the middle months of pregnancy, I have generally found it to require considerable and sometimes prolonged search before it could be hit on, and the extreme mobility of the fœtus at this early period seldom allows of its being heard for many minutes consecutively in the same spot.

"The period at which the fœtal heart first becomes audible is very differently estimated by different authors.

"M. Depaul,[1] who investigated the subject with great care, stated that in 73 cases in which he examined for the fœtal heart-beat before the 20th week, 11 were in the third month, and in none of them was it audible; 22 were in the fourth month, and in two of them only, each of whom had reached three and a half months and dated from single coitus, was it perceptible; in the remainder, who were more than four calendar months pregnant, not to hear the fœtal heart was the exception. He further relates that, in endeavouring to show that the uterine souffle is audible at a very early period of pregnancy, he came upon two cases which proved to him that the heart can be heard at the end of the third month."

Dr. M. remarked that "the question of the earliest period at which these sounds become audible is of importance from two points of view: first, from the bearing it has upon practice in relation to the diagnosis of pregnancy in the earlier months; and, secondly, it is of physiological interest as showing at how early a period of its development a fœtus possesses a heart capable of producing sounds audible through the abdominal wall of the mother.

"Thus, in the fourth lunar month, *i. e.*, from the end of the 12th to the end of the 16th week (and you will remember that in the case before us the fœtus was supposed to be in the 14th week), the fœtus, according to Schroeder, is from 10 to 17 centimetres (4–6½ inches) in length, and weighs as much as 1860 grains, or about 3¾ ounces; and it is during this month that the external genitals first begin to assume the sexual distinction; similarly, Caspar says, that at the end of the fourth lunar month the embryo weighs 2½–3 ounces, and is from 5 to 6 inches long, the sex is just recognizable, etc. Now, it seems to me to be a point worthy of attention, if it can be proved that a being in other respects so small and imperfect, yet has a heart of such considerable power, for the size of the organ must be exceedingly small."—*Edinburgh Medical Journ.*, September, 1875.

65. *On the Employment of Chloral as an Anæsthetic in Natural Labour.*—Dr. H. Chouppe, in the *Annales de Gynécologie*, May, 1875, has collected a large number of cases, recorded by various authors, exemplifying the use of chloral in labour; and from these, together with his own observations, he concludes that chloral, even in a dose capable of producing complete anæsthesia,

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[1] Traité d'Auscultation Obstétricale. Paris, 1847. Pp. 243 *et seq.*

in no way suppresses, or even diminishes, the contractility of the unstriped muscular fibres in general, the uterus included. Chloral, which is capable of producing in a marked degree cutaneous anæsthesia, can equally nullify the pains of labour. This suppression of pain is not due to diminution of the uterine contractions either in their intensity or their frequency; on the contrary, all their power is preserved, and, if they seem occasionally to be retarded, that which they lose in frequency they gain in force; so much so, that labour is accelerated and not retarded. When uterine inertia is recognized as the cause of too prolonged labour, which has exhausted the powers of the patient, or when the patient is particularly irritable and fatigued by the useless efforts, and the uterine contractions diminish in frequency or intensity—when inertia is threatened, in fact—chloral administered in a dose sufficient to produce complete anæsthesia, is generally capable of restoring energy to the uterus, and force and regularity to the contractions.

Neither the infant nor the mother is injured by chloral anæsthesia. M. Pelissier, who has employed chloral largely, states that when administered prudently and in suitable doses, it is perfectly innocuous; indeed, the fœtus runs less risk of becoming asphyxiated. No evil after-effects retarding convalescence have ever been observed; on the contrary, patients seem to rally more rapidly from having been spared so much fatigue.

It remains to indicate more precisely in what cases chloral should be administered, at what stage of labour it ought to be given, in what dose, in what form, and by what channel.

Chloral will agree whenever it procures sleep, induces repose, and lessens the pains of parturition. It should especially be employed in tedious labours, and in primiparæ, because then the pains have an intensity which we only find exceptionally in subsequent confinements. It often happens that, the pains being very intense and the patient very nervous, force is wasted uselessly; and at the moment when they have, above all, need of all their force for the last expulsive efforts, the patients are fatigued, and the uterus ceases to contract. In these cases chloral, which procures repose and which prevents the patient from wasting her strength, is formally indicated.

Among nervous patients, who excite themselves and complain beyond measure, chloral will expedite delivery; and, even if during pregnancy we can promise to materially diminish the pains of labour, we shall lessen considerably the patient's apprehension.

Among hysterical patients, chloral acts beneficially.

The consideration of the employment of chloral in operative midwifery, and in eclampsia, as advocated by Dr. Playfair, is purposely omitted here, in accordance with the title of the paper.

When should chloral be given? In the immense majority of cases, when the dilatation of the os is complete—just as the expulsive pains commence. It is only in exceptional cases, and where patients suffer unusually, that chloral should be given during the period of dilatation.

The dose of chloral necessary will vary with the susceptibility of the patient, and with the effect one wishes to obtain. The dose generally varies from one drachm to one and a half drachm, given in two doses at half hour's interval, or in fifteen-grain doses every quarter of an hour, if we do not desire too rapid an effect.

The natural channel for its administration, and the one which should always have the preference, unless contraindicated, is by the stomach. The syrup of gooseberry is the best agent for masking the pungent flavour; and the solution should be made of such a strength that a teaspoonful represents fifteen grains. Should vomiting precede or follow its administration, it may be given by the rectum. As regards intravenous or hypodermic injections, they are too dangerous methods for ordinary natural labour.—*London Med. Record*, June 23, 1875.

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66. *The Placenta in a Triplet Birth.*—M. DEPAUL exhibited, at the Académie de Médecine, the placenta derived from a woman who had been delivered of triplets, the children at present (thirty days afterwards) being still alive. The